

## SAE Handbook, Lesson RK.1

# What is a Budget and How Do We Prepare One?

### Unit. Record Keeping

### Problem Area. What is a budget?

#### Student Learning Objectives. As a result of this lesson, the student will...

1. Define the word budget
2. List five reasons why budgets are important in record keeping
3. Identify typical expense and income items found in a budget
4. Prepare a simple budget



#### Time

Instruction time for this lesson: 50 minutes



#### Resources

<http://www.cals.ncsu.edu/agexed/sae/toolbox/index.html>



#### Tools, Equipment and Supplies

Writing Surface  
Overhead Projector  
RK.1.TM.A-E  
RK.1.SA.A  
RK.1.PPT (There is also a PowerPoint presentation that contains the material from this lesson.)



#### Key Terms

The following term(s) are presented in this lesson and appear in bold italics:

- ***Budget***



## Interest Approach

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*Since record keeping may be viewed as a hard or unpleasant task by some students, we are going to try and draw an analogy between something more pleasant (cooking and food) with record keeping. So the first part of this lesson deals with food, but we will make the transition to record keeping in a bit.*

### Activity

*Divide the class into small groups of two or three people. Display RK1.TM.A. and read the statements to the class. Give the students about five minutes to answer the three questions.*

### RK1.TM.A.

#### A Food Challenge

You are planning a Thanksgiving dinner for eight people.

You plan to serve a 16-pound turkey, mashed potatoes, a green bean casserole, dinner rolls and a pumpkin pie.

How much do you think it would cost to prepare this meal?

What ingredients would you need to buy (assuming you have nothing)?

When would you need to start fixing each item so that everything is ready to serve by noon?

*Have the various groups of students share their answers. Then display RK1.TM.B. This lists the ingredients for each food item and the amount of time it would take to prepare and cook the item. See which students were closest on their answers.*

### RK1.TM.B.

#### Cooking Times and Ingredients

##### 16 Pound Turkey (4 hours)

- 16 pound turkey

##### Dinner Rolls (2 hours)

- 18 oz. (4 cups) all-purpose flour
- 1 package (2-1/4 tsp.) rapid-rise yeast
- 1/3 cup sugar
- 1 tsp. salt
- 1 cup milk
- 4 oz. (8 Tbs.) unsalted butter
- 3 large egg yolks

#### Pumpkin Pie (1 hour 15 minutes)

- 1 (9-inch) unbaked pie shell
- 1 (15-ounce) can pumpkin (about 2 cups)
- 1 (14-ounce) can Eagle Brand Sweetened Condensed Milk (NOT evaporated milk)
- 2 eggs
- 1 teaspoon ground cinnamon
- 1/2 teaspoon ground ginger
- 1/2 teaspoon ground nutmeg
- 1/2 teaspoon salt

#### Green Bean Casserole (40 minutes)

- 1 can (10 3/4 ounce) Campbell's Cream of Mushroom Soup
- 1/2 cup milk
- 1 teaspoon soy sauce
- Dash pepper
- 4 cups cooked cut green beans
- 1 1/3 cup French's French fried onions

#### Mashed Potatoes (30 minutes)

- 5 large potatoes (russets recommended)
- 4 to 5 tablespoons (1/2 stick) butter
- 1/3 to 1/2 cup milk
- salt and pepper



This was not an easy task. When a cook prepares a meal, the cook has something to follow. The “thing” the cook has to follow lists all the ingredients needed, the steps to follow, and the amount of time needed for each step. What does a cook use?

#### **A Recipe!**

Why does a cook use a recipe? A recipe tells:

- What ingredients are needed
- How much of each ingredient is needed (thus you could figure the cost)
- The various steps involved in preparing each dish and how long it will take

## Summary of Content and Teaching Strategies

### **OBJECTIVE 1: Define the word budget**



Just like a cook has a recipe to follow, in our SAE record keeping we should have a budget we follow. Exactly what is a budget?

*Have each student write a definition of budget and then share the definitions. Display RK.1.TM.C and discuss the definition of a budget. Cover the bottom half of the transparency.*

## RK.1.TM.C

What is a **Budget**?

- A detailed plan of income and expenses expected over a certain period of time.

Why is a budget needed?

- To determine if it is likely that you will make a profit
- So you will know how much of a product to buy
- So you will know how much money is needed to get started in an activity
- So you can manage your money more wisely
- To show people who might be willing to loan you money in order to obtain a loan
- To develop a savings plan

### OBJECTIVE 2: List five reasons why budgets are important in record keeping.

*Ask students why a budget is needed. After several answers are given, uncover the bottom part of transparency RK.1.TM.C and discuss.*

### OBJECTIVE 3: Identify typical expense and income items found in a budget.



A budget typically contains a list of expenses that are anticipated and a list of income that is anticipated. What types of monthly expenses and income would one find in a typical household?

*Ask students how many of their parents have a budget at home? Have students brainstorm a list of monthly expenses they or their parents have. Write these answers on the writing surface. After they run out of ideas, display RK.1.TM.D to see if there are other expenses and income items they might not have thought of.*

## RK.1.TM.D.

### Typical Expenses for a Household Budget

Mortgage Payment / Rent	Home / Renter's Insurance
Heat	Electric
Natural Gas	Water/Sewer
Cable / Satellite TV	Home Maintenance
Telephone	Internet Access
Auto Payment	Car Insurance
Gas (for Automobile)	Auto Maintenance
Daycare	Food
Entertainment	Dining Out
Clothing	Life Insurance
Disability Insurance	Travel
Medical	Health Club
Education	Credit card payments
Personal Loans	Gifts
Charity	

### Typical Income for a Household

- Wages/Salary
- Interest on Savings
- Income from Investments



Your SAE budget often contains a different list of expenses and income. If you were raising livestock or crops, your expenses would be different. What types of expenses and income items might a student with an entrepreneurship SAE have?

*Have students brainstorm a list of expenses and income that would be associated with an entrepreneurship SAE. Write the answers on the writing surface. After they run out of ideas, display RK.1.TM.E to see if there are other expenses and income items they might not have thought of.*

## RK.1.TM.E

### Typical Expenses for a SAE Entrepreneurship Budget

- Feed
- Purchase of plants or animals
- Seed
- Fertilizer
- Equipment & Supplies
- Pesticides, Herbicides
- Labor
- Fuel, oil
- Transportation
- Advertising
- Items bought for resale
- Land cost
- Crop storage
- Crop Insurance

### Typical Income for an Entrepreneurship SAE Budget:

- Sale of products grown (corn, wool, cucumbers, peaches, lettuce, pigs, eggs)
- Payment for services rendered (mowing lawns, pet sitting services, detailing tractors, landscaping, etc.)
- Sale of products made (floral arrangements, livestock gates, trailers, corsages)

## OBJECTIVE 4: Prepare a simple budget



Now that we have an idea of the type of expense items and income that goes into a budget, we are going to prepare a simple budget. We have a fictitious student who is going to start a mulching service. I will distribute a sheet with some information about Moe. Your task is to take the information given and then prepare a budget for Moe.

Distribute RK.1.SA.A and explain the problem to the students. Walk around the room and help students as needed to prepare the budget. Here are the answers the students should arrive at.

- *Anticipated Expenses*
  - Advertising – \$200
  - Equipment – \$250
  - Mulch – \$2,700 (12 homes @15 cubic yards @ \$15 per cubic yard)
  - Delivery Cost - \$900 (12 homes @ 15 cubic yards @ \$5 per cubic yard)
  - TOTAL \$4,050
- *Anticipated Income*
  - Sale of Mulch - \$5,580 (12 homes @ 15 cubic yards @\$31 per cubic yard)
- *Total Anticipated Profit - \$1,530 (\$5,580-\$4,050)*



## Review/Summary

Call on each student to give one example of an expense that might be in a budget.



## Application

### **Extended Classroom Activity:**

Have each student develop an anticipated budget for their SAE.

### **FFA Activity:**

Have the student determine which FFA degree the anticipated income from their SAE program budget would qualify them for.

### **SAE Activity:**

To see what types of figures might be used in a crop production budget, have students go to the University of Illinois Farm Docs website and look up cost production figures for a crop of their choice. [http://www.farmdoc.uiuc.edu/manage/enterprise\\_cost/annual\\_crop\\_budgets.asp](http://www.farmdoc.uiuc.edu/manage/enterprise_cost/annual_crop_budgets.asp)

### **Evaluation:**

The budget the student is to prepare for their SAE program will be the assessment for this lesson.

### **Answers to Assessment:**

Varies according to the budget prepare by the student.

## **A Food Challenge**

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- 1 tsp. salt
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### Pumpkin Pie (1 hour 15 minutes)

- 1 (9-inch) unbaked pie shell
- 1 (15-ounce) can pumpkin (about 2 cups)
- 1 (14-ounce) can Eagle Brand Sweetened Condensed Milk (NOT evaporated milk)
- 2 eggs
- 1 teaspoon ground cinnamon
- 1/2 teaspoon ground ginger
- 1/2 teaspoon ground nutmeg
- 1/2 teaspoon salt

### Green Bean Casserole (40 minutes)

- 1 can (10 3/4 ounce) Campbell's Cream of Mushroom or 98% Fat Free Cream of Mushroom Soup
- 1/2 cup milk
- 1 teaspoon soy sauce
- Dash pepper
- 4 cups cooked cut green beans
- 1 1/3 cup French's French fried onions

### Mashed Potatoes (30 minutes)

- 5 large potatoes (russets recommended)
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### **What is a *Budget*?**

- A detailed plan of income and expenses expected over a certain period of time.

### **Why is a budget needed?**

- To determine if it is likely that you will make a profit
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### **Typical Expenses for a Household Budget**

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Cable / Satellite TV	Home Maintenance
Telephone	Internet Access
Auto Payment	Car Insurance
Gas (for Automobile)	Auto Maintenance
Daycare	Food
Entertainment	Dining Out
Clothing	Life Insurance
Disability Insurance	Travel
Medical	Health Club
Education	Credit card payments
Personal Loans	Gifts
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### **Typical Income for a Household**

Wages/Salary  
Interest on Savings  
Income from Investments

### **Typical Expenses for a SAE Entrepreneurship Budget**

- Feed
- Purchase of plants or animals
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- Labor
- Gasoline, oil
- Transportation
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- Land cost
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### **Typical Income for an Entrepreneurship SAE Budget**

- Sale of products grown (corn, wool, cucumbers, peaches, lettuce, pigs, eggs)
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## RK.1.SA.A.

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### Moe's Mulching Service

Moe has decided to start a mulching service. He will buy mulch, deliver it to the homeowner and then spread it. (Mulch is a ground up bark spread around plants to prevent weed growth and conserve water.)

He can buy mulch at \$15 a cubic yard.

Moe's cousin is willing to use his truck to deliver the mulch for \$5 a cubic yard.

An average home where Moe lives needs 15 cubic yards of mulch every year or two.

Moe knows he will be the busiest in the spring but thinks he will average one home a month per year.

Moe is going to charge homeowners \$31 per cubic yard of mulch.

Moe plans to spend \$200 for advertising.

Moe plans to spend \$250 for a wheel barrow, shovels, rakes, work gloves, etc.

### Calculate a Budget for Moe for One Year

#### Anticipated Expenses

Advertising –  
Equipment –  
Total Cost of mulch –  
Total Cost to deliver mulch –  
Total Anticipated Costs

#### Anticipated Income

Total Sale of Mulch -

How much should Moe make off this business? \_\_\_\_\_